

What is claimed is:

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1. An anti-immunodeficiency virus antibody which binds to a cellular protein.

2. The antibody of claim 1, wherein said immunodeficiency virus is selected from the group consisting of HIV-1, HIV-2 and SIV.

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3. The antibody of claim 1, wherein said protein is a chemokine receptor protein.

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4. The antibody of claim 3, wherein said protein is an HIV receptor protein.

5. The antibody of claim 3, wherein said protein is a cellular cofactor for a cellular HIV receptor protein.

5 *4*
6. The antibody of claim 5, wherein said protein is selected from the group consisting of CXCR4 and CCR5.

6 *5*
7. The antibody of claim 6, wherein said protein is CXCR4.

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8. The antibody of claim 1, wherein said antibody is selected from the group consisting of a monoclonal antibody and a synthetic antibody.

8 *7*
9. The antibody of claim 8, wherein said antibody is a monoclonal antibody.

9 *8*
10. The antibody of claim 9, wherein said antibody is MAB 12G5.

11. An isolated DNA encoding an anti-immunodeficiency virus antibody capable of binding to a cellular protein.
12. The isolated DNA of claim 11, wherein said immunodeficiency virus is selected from the group consisting of HIV-1, HIV-2 and SIV.
13. The isolated DNA of claim 11, wherein said protein is a chemokine receptor protein.
14. The isolated DNA of claim 13, wherein said protein is an HIV receptor protein.
15. The isolated DNA of claim 13, wherein said protein is a cellular cofactor for a cellular HIV receptor protein.
16. The isolated DNA of claim 15, wherein said protein is selected from the group consisting of CXCR4 and CCR5.
17. The isolated DNA of claim 16, wherein said protein is CXCR4.
18. The isolated DNA of claim 17, wherein said antibody is MAB 12G5.
19. A method of inhibiting infection of a cell by HIV comprising adding to said cell an anti-immunodeficiency virus antibody capable of binding to a cellular protein on said cell, wherein upon binding of said antibody to said cellular protein infection of said cell by HIV is inhibited.

20. A method of treating HIV infection in a human comprising administering to said human an anti-immunodeficiency virus antibody capable of binding to a cellular protein on a cell, wherein upon binding of said antibody to said cellular protein infection of said cell by HIV is inhibited thereby treating said HIV infection in said human.

21. A method of obtaining an anti-immunodeficiency virus antibody capable of binding to a cellular protein on a cell comprising
generating a panel of antibodies directed against HIV or SIV infected cell proteins, and
screening said antibodies for anti-immunodeficiency virus activity to obtain an antibody having anti-immunodeficiency virus activity.

22. A method of identifying a target cell for immunodeficiency virus infection comprising
adding to a population of cells an anti-immunodeficiency virus antibody capable of binding to a cellular protein on a cell, wherein binding of said antibody to a cell in said population is an indication that said cell is an immunodeficiency virus target cell.

23. A method of identifying a candidate anti-immunodeficiency virus compound comprising
isolating a test compound capable of binding to an anti-immunodeficiency virus antibody, which antibody binds to a cellular protein, and
assessing the ability of said test compound to inhibit infection of a cell by an immunodeficiency virus in an antiviral assay, wherein inhibition of infection of said cell by said immunodeficiency virus in the presence of said test compound is an indication that said test compound is an anti-immunodeficiency virus compound.

24. A method of measuring the level of expression of CXCR4 on a cell comprising adding to said cell an antibody which binds to said CXCR4 and assessing the amount of antibody bound to said cell, wherein the amount of said antibody bound to said cell is a measure of the level of expression of said CXCR4 on said cell.

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